

Remarks

The Examiner's courtesies extended during the telephone interview of February 19, 2004 are acknowledged and appreciated.

Claims 14-25 & 27-30 are pending. Each presently stands rejected.

Claim Rejections — 35 U.S.C. § 103

Claim 14 has been amended so that the coating comprises "0.01 g/L to 1.9 g/L of polymer molecules" *Aoki et al.* (WO-95/28509) discloses concentrations of about 2 g/L or greater of a water-soluble polymer.

Accordingly, Applicants have amended claim 14 in order to avoid overlapping ranges with the cited art so that the extent of non-overlapping concentrations will lie outside experimental error or rounding.

None of *Aoki et al.*'s examples disclose an amount of water-soluble polymer below 2.0 g/L. One aspect of this limitation is that low concentrations tend to promote a reduction in industrial waste and off gases, thereby maintaining a satisfactory global environment. *See*, specification, p. 1, ll. 21-23. For these reasons, the *Aoki et al.* reference teaches away from the invention as claimed. Accordingly, it cannot be said that the latter is rendered obvious by the former.

The Examiner notes that ". . . Aoki et al. is silent regarding the thickness of the coatings and the amount of carbon present" (Office Action, ¶ 6), [and that] ". . . it would have been obvious . . . to have varied the concentration of the components used, depending on the thickness of the coating desired, or to have coated the metal with multiple layer . . . depending on the thickness of the desired [coating] for a given application" (*Id.*)

However, the specification states that “an excellent adherence by the laminated film is not obtained at coating thicknesses below 5 nm, while exceeding 500 nm has a high potential for impairing the color of the material.” Specification, p. 10, ll. 24-26 (emphasis added).

For these reasons, it cannot be said that it would have been obvious to have varied the concentration of the components used, depending on the thickness of the coating desired, or to have coated the metal with multiple layers. This is because the desired properties are not achieved over the entire property spectrum. *See, e.g.*, Comparative Examples 1-3, which resulted in the situation in which “. . . the property spectrum was not satisfied in its entirety by any of the comparative examples” Specification, p. 21.

Examples include a water-soluble polymer at a concentration of 0.5 g/L. Reference Table 2 (specification, p. 21) shows that this composition showed a “plus” sign, signifying that de-bonding from the substrate was completely absent.

In light of these differences, it cannot be said that the invention as claimed is rendered obvious by *Aoki et al.*

Claim 17 of the parent case was allowed. It corresponds to claim 24 of the present case.

All formal and substantive requirements of patentability appear to have been met. A Notice of Allowability is therefore requested.

Respectfully submitted,

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